reveal any *Haemagogus* there. We also made one search of the mangrove near Chetumal, Quintana Roo, Mexico, just north of British Honduras, but did not find *Haemagogus*. Dr. Jorge Boshell (personal communication) collected the new species along the east coast of Guatemala just north of Puerto Barrios. He captured adults attempting to bite in mangrove swamps and recognized the species on sight by the coppery sheen of the mesonotum, the yellowish coxae and the habit of females of attacking man about the head. It appears that this is a species of restricted range. It is morphologically close to, and the ecological equivalent of the littoral species *H. regalis*.

Relation to yellow fever. Nothing is known, but probably not of significance in the epidemiology of sylvan yellow fever because of its restricted littoral range and habitat. The species is in part peridomestic however, and appears to be abundant at Belize. Thus it might conceivably become involved in the transmission of yellow fever from man to man if the disease were once introduced.

Acknowledgment. The authors wish to express their appreciation to Professor Eustorgio Méndez, Gorgas Memorial Laboratory, for the illustrations.

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A NEW MEMBER OF A SIBLING SET BELONGING TO THE DROSOPHILA TRIPUNCTATA GROUP
(Diptera: Drosophilidae)

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Drosophila leticiae Pipkin, n. sp.

External characters of imagines: ♂ ♀, Arista with 6 or 7 dorsal and 3 ventral branches in addition to terminal fork. Front dull yellowish brown, darker in ocellar triangle; ocelli pink; 7 inconspicuous frontal hairs on each side apex of frontal triangle; orbital hairs 5 or 6. Proclinate orbital ⅘ posterior reclinate; anterior reclinate thin, about ¼ proclinate. Face, ♂, white; ♀, yellowish. Carina broad, flat, widening distally; white in male; yellowish brown in female. One prominent oral bristle; proboscis yellowish, shining, darker distally, with yellowish hairs. Cheek yellowish, absent behind; width from base of oral bristle to eye border 1/12 greatest diameter of eye. Orbits yellowish brown. Eye dull red, a little darker in the dorsal ⅕; pile straw-colored. Eye index 1.2. Palpi yellow, with one prominent subapical hair, 2 others on lateral margin of palpus in addition to small hairs. Acrostichal hairs in 6 rows; mesonotum shining brown; pleura shin-

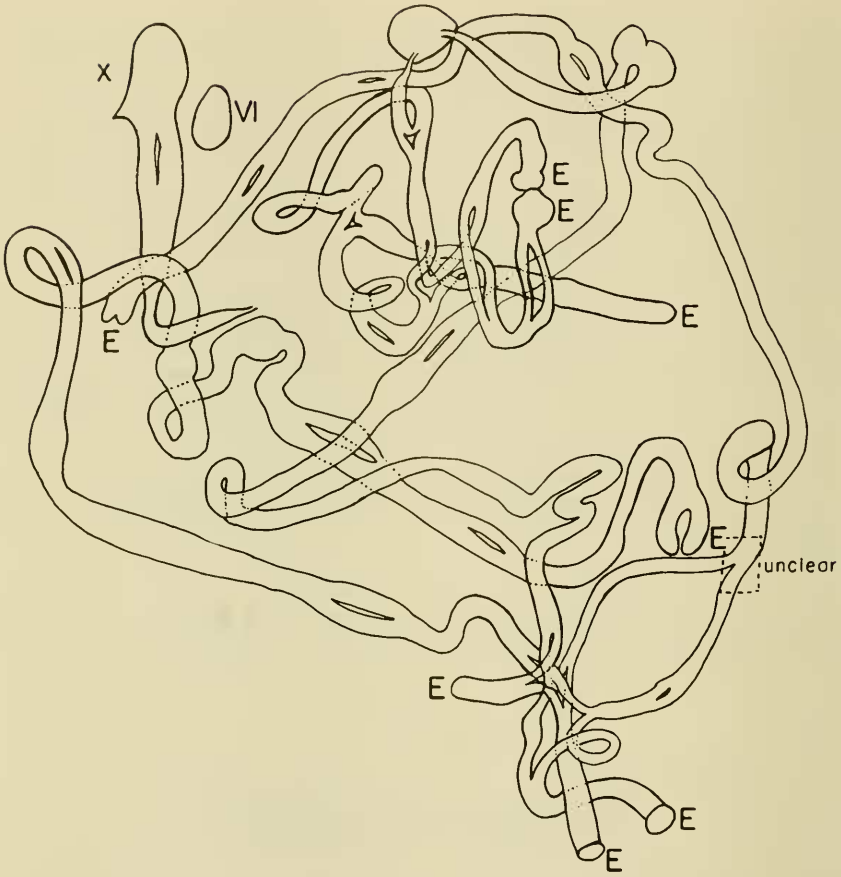

Fig. 1. Outline drawing of paired homologues of hybrids between *D. leticiae*, n. sp. and *D. metzii* showing translocations involving the 4 longer autosomes and some absence of pairing of portions of homologues. Only the X chromosomes (accidentally fragmented in making the preparation) and the shortest autosome, located beside the X, are not involved in the translocations. Ends of chromosomes are marked "E."

ing yellowish-brown; scutellum dark brown; anterior scutellars slightly divergent; halteres dusky yellowish. Anterior sternopleural ½ posterior sternopleural; mid-sternopleural thin, ¾ anterior. Legs yellowish; 2 golden hairs proximal end basal metatarsus of leg 3. Wings brown; veins darker brown; posterior crossvein clouded; costal index, 3.1; 4th vein index, 1.5; 5x index, 1.25; 4c index, 0.75; Heavy bristles on the basal ⅓ of third costal section; one prominent hair at apex of first costal section. Abdomen (♂) yellowish brown with shining black apical bands on tergites 2–6 extending almost to lateral margins, with indistinct medial interruptions on tergites 2, 3, 4; apical band thickened medially on tergites 5, 6. Anal plates yellowish; flattened laterally to form a keel shaped projection; numerous bent

hairs on ventral margin. Sternites pale gray except most posterior one which is yellowish. Female abdomen yellowish brown; tergites 2, 3, 4, 5 with black shining apical bands fading at lateral margins; paramedial extensions on these tergites; tergite 6 with black medial trapezoid shaped mark; tergite 7 yellow; sternites pale.

Body length (etherized) ♂ 2.5 mm; ♀ 3 mm. Wing length ♂ 2.25; ♀ 3 mm.

Internal characters of imagines and genitalia: Anterior malpighian tubules branched basally at a distance the width of intestine, free, with distal ends turned back; posterior malpighian tubules apposed with continuous lumen; testes pale yellow; 3 inner coils (vas deferens) and 4 outer coils (testis proper); sperm pump with 2 posterior diverticula each scarcely the length of the greater diameter of the pump. Forceps with 11–13 primary teeth arranged in a sinuous row; no secondary teeth; the two forceps joined by a medially grooved plate; about 8 marginal bristles and 7 bristles on the upper surface of the forceps; toe rounded with about 9 bristles. A long medially directed bristle on the posterior border of each concha of the hypandrium. Apodeme of the phallus a slightly bent rod; head of phallus simple, bulbous distally with ventrally attached laterally projecting ears. Spermatheceae with distal portion dark brown, less chitinized proximally; oval, no constriction on inner duct; ventral receptacle thin, tightly coiled, with about 20 gyres. Ovipositor golden brown, acuminate at tip; 19 teeth.

Egg: with 4 slender filaments, each 0.7 the length egg. Puparium golden brown; aperture of anterior spiracles ringed with black stigmatic plates bearing about 27 amber filaments; horns including anterior spiracles a little less than ½ the length of the puparium; posterior spiracles black; apart.

Chromosomes: Laboratory culture 3L5 shows salivary chromosomes with a medium length X, markedly heterochromatic at the right hand end; one long autosome, three medium length autosomes, and a very short autosome; chromocenter scant. Salivary chromosomes of hybrids between this species and its sibling, *D. metzii* (Barro Colorado Island strain), show the presence of translocations involving the 4 long autosomes and a lack of pairing of portions of all homologues (Fig. 1).

Belongs in subgroup IV of the *tripunctata* species group of the subgenus *Drosophila*, being a sibling of *D. metzii Sturtevant* 1921 and *D. pellewae* Pipkin and Heed, 1964. *D. leticiae* differs from *metzii* and *pellewae* in the distinctly smaller male body length, absence of sexual dimorphism of abdominal coloration, and possession of fewer primary teeth of forceps. *D. leticiae* further differs from *metzii* in the yellowish brown color of the female face, less chalky aspect of the male face; from *pellewae* in the white face of the male. Reciprocal crosses of *D. leticiae* and *D. metzii* yield some viable hybrids. Many of the hybrids were fertile *inter se*, but laboratory populations derived from them usually died out in F_2 or F_3. *D. pellewae*, when used as the female parent, produced few or no progeny with *D. leticiae* males, though hybrids were obtained from the reciprocal cross. The latter were sometimes fertile *inter se*, but laboratory populations derived from them usually die out in F_2 or F_3.

Distribution: Holotype ♂; 12 ♂, 12 ♀ paratypes from laboratory

culture 3L5 developed from 15 founder females netted over fallen cacao fruit in house yard on the Amazon River at El Marco, Brasil, near Leticia, Colombia, June 16–20, 1964 (U.S. National Museum); 10 ♂ and 10 ♀ paratypes from laboratory stock 3L5, same data, (Drosophila Type and Reference Collection) Austin, Texas.

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NEW SPECIES OF DOLICHOPODIDAE FROM THE UNITED STATES AND MEXICO (Diptera)

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The present paper is primarily intended to supplement the synopsis of the Dolichopodidae of the Southeastern United States (Robinson, 1964), and includes those undescribed species from the Eastern U.S. which have been encountered since that study. A number of species from the Western U.S. and some related or otherwise interesting species from Mexico and Central America are also described.

Dolichopus crassitibia, n. sp.
(Figs. 1–4)

Male.—Length 3.0 mm; wing 3.0 mm by 1.0 mm.

Face about a fourth as wide below as high, becoming gradually wider above, covered with silvery white pollen; front broad, broader above, metallic greenish, almost completely covered with white pollen; palpus small, pale; proboscis brown. Antenna black; segment 1 short, widened distally from a narrow base, with hairs above; segment 2 shorter and wider, very short below; segment 3 about as long as wide, blunt; arista from near middle of dorsal edge. Lower postocular setae pale and somewhat flattened.

Thorax metallic green, slightly dulled with grayish pollen, a violet band between rows of small acrostichals; 6 pairs of large dorsocentrals, 5th pair set inward from the rest of the line; scutellum with large pair of bristles and small erect hair on the lateral margin; a black bristle over the fore coxa.

Legs black with black setae, all knees, tips of fore and middle tibiae, inner surface of fore tibia, and base of fore metatarsus yellowish. Fore and middle coxae with numerous bristles on anterior surface, distal ones large; middle and